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COMPENSATORY FINANCING MECHANISMS

Review of developments in the field of
compensatory financing of export earnings shortfalls

Report by the UNCTAD secretairat

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INTRODUCTION

1. At the eighth session of UNCTAD, Governments recognized that commodity-related shortfalls in export earnings of developing countries are in varying degrees an important obstacle to their development efforts. They stated that "beneficiary countries welcome the compensatory financing mechanisms - namely the IMF-CCFF, the ACP-EEC STABEX and SYSMIN schemes of the Lomé Convention, the EEC scheme for non-ACP least developed countries and the Swiss scheme" and agreed that "the problems of shortfalls in the commodity export earnings of developing countries arising from market fluctuations, as well as matters relating to compensatory financing of export-earnings shortfalls, including actions taken or which might address problems identified in this area, should be kept under continuous review in UNCTAD. The UNCTAD secretariat should follow developments in various compensatory financing schemes and their implications for the development of developing countries."[1] Subsequently, Governments included in the work programme of the Standing Committee on Commodities an item entitled Compensatory financing mechanisms with a focus on "analysis of problems stemming from commodity-related export earning shortfalls of developing countries and review of developments in the field of compensatory financing of export earnings shortfalls" (cf. TD/B/CN.1/8, page 2). In order to assist the Committee in its discussions in this area, the secretariat has continued to keep developments in existing compensatory financing mechanisms under review and has begun analytical work on problems stemming from commodity-related export earnings shortfalls of developing countries with a statistical review of the incidence of shortfalls at the country and commodity level. This document contains review of recent developments in existing mechanisms and, in the annex, a short report on the background work under way.

2. The incidence of shortfalls in non-fuel commodity export earnings of developing countries rose sharply during the 1980s, as a result of falling world prices for major commodities, as well as of supply fluctuations at the country level.[2] It is estimated that non-fuel commodity export earnings shortfalls for developing countries as a group averaged 4.5 billion SDRs a year between 1981 and 1990, with virtually all developing countries experiencing sustained shortfalls.[3] Nearly three quarters of the shortfalls occurred between 1986 and 1990, a period when prices were at their lowest levels for many commodities. The highly commodity-dependent developing countries, particularly the least developed countries of Africa and the Pacific island region, experienced the largest incidence of shortfalls relative to their export earnings. The LDCs accounted for 15 per cent of total shortfalls, proportionally much greater than their 7 per cent share of developing country non-fuel commodity exports.

3. Currently, there are five compensatory financing facilities available to developing countries, notably the Compensatory and Contingency Financing Facility (CCFF) of the IMF, the STABEX and SYSMIN schemes of the ACP-EEC Lomé Conventions,

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[1] Cartagena Commitment, paras. 204 and 212.

[2] Details on the export earning shortfalls experienced by developing countries during the 1980s are provided in the annex.

[3] UNCTAD estimate using a four-year arithmetic moving average as the reference level.

the STABEX-LDC-ALA scheme of the European Community, and the Swiss compensatory financing programme.

4. The compensatory financing facility of the IMF was established in 1963 to provide additional financial assistance to IMF member countries, particularly exporters of primary commodities, experiencing balance-of-payments difficulties due to export earnings shortfalls -provided these were temporary and largely attributable to circumstances beyond the country's control. Ideally, the facility should allow a country to borrow when its export earnings and financial reserves are low and to repay when they are high, so that its import capacity is unaffected by fluctuations in export earnings caused by external events.

5. The STABEX scheme, established under the first ACP-EEC Lomé Convention in 1975 and revised under subsequent Conventions, is a commodity-specific scheme providing compensatory finance to ACP countries in respect of shortfalls in earnings from selected agricultural commodity exports to the European Community. Under the fourth Lomé Convention, transfers made under STABEX are in grant form and are to be used in the commodity sector experiencing the shortfall, for diversification to other agricultural activities or for the processing of agricultural products.

6. The SYSMIN scheme under the Lomé Convention is a long-term soft loan programme for ACP countries experiencing difficulties in their mining sectors. The main aims of SYSMIN are to safeguard mining production and mineral export sectors by actions to alleviate adverse effects on their economies caused by declines in their production or export. Mining projects or programmes financed under SYSMIN must involve rehabilitating, maintaining, rationalizing or modernizing production or export capacities which have suffered severe disruptions or which have been undermined by major technological and economic changes.

7. The STABEX-LDC-ALA scheme was established by the European Community in 1987 to provide finance against commodity-specific export earnings shortfalls for least developed countries not signatories to the Lomé Convention. This facility is similar to STABEX, with all transfers given as grants. The transfers must be used for projects or programmes in the sector in which the loss of export earnings occurred, or for diversification purposes.

8. In 1988, the Swiss Government established the Swiss compensatory financing programme to compensate least developed countries for shortfalls in earnings from selected agricultural commodity exports to Switzerland. The transfers are allocated to structural adjustment programmes or projects, if possible for the commodities concerned, with the aim of helping to stabilize earnings, eliminate endogenous shortfall factors and promote diversification activities.

Chapter 1

RECENT DEVELOPMENTS IN THE IMF COMPENSATORY AND CONTINGENCY FINANCING FACILITY

9. The IMF Compensatory Financing Facility (CFF) has undergone several important changes since it was established in 1963[4]. In addition to compensation for export earnings shortfalls, the Facility was extended in 1979 to include compensation for shortfalls in earnings from tourism and workers remittances. In 1981, the cereal import facility was introduced to compensate countries for excesses in the cost of cereal imports. In 1988, the IMF established the Compensatory and Contingency Financing Facility (CCFF) which incoporated the CFF and the cereal facility, and added a contingency element. The distinctive feature of this new Facility is the provision of contingency financing for Fund-supported structural adjustment programmes to cover external shocks which were not anticipated and are beyond the control of a country. To date, four developing countries[5] have Fund arrangements with external contingency mechanisms; none of these countries has made a purchase under the contingency element.

10. In 1990, as part of the IMF's policy adaptations in the light of events in the Middle East, losses resulting from shortfalls in services, such as receipts from pipelines, canals, shipping, transportation, construction, and insurance were added to the export shortfall element of the CCFF. At the same time the IMF allowed quicker access to compensatory credits, permitting member countries to use estimated, rather than actual, data for the entire shortfall year to calculate the earnings shortfall (compared with a maximum of six months' estimated data previously). Also, in response to disturbances in the oil market in 1990/91, an oil import facility was temporarily added to the compensatory element, operating in a way similar to the cereals import facility. This facility expired in December 1991.

11. Table 1 shows that in the ten-year period 1982 to 1992 total drawings by developing countries from the IMF Compensatory Financing Facilities amounted to 11.2 billion SDRs. Most of these drawings have been made by large commodity exporters with low commodity-dependency, with India, Argentina, Brazil and the Philippines accounting for over 40 per cent of the total drawings. African countries accounted for 16 per cent of drawings while the least developed countries as a group accounted for only 4 per cent of total drawings. No least developed country made drawings in the 1990s, while only one African country (Côte d'Ivoire) made drawings in the same period. During the ten-year period 1982 to 1992, the number of drawings made by developing countries declined sharply from a peak of 22 in 1983 to a low 2 in 1990. With the exception of 1991, drawings have averaged less than 10 a year since 1985. In the first six months of 1993 there has been one drawing by the Republic of Moldova, under the compensatory element of the CCFF.

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[4] See TD/B/AC.43/8 (December 1988), pages 10-20 for more details on the operation of the IMF Compensatory Financing Facility in the 1963 to early 1980s period.

[5] Algeria, Costa Rica, Philippines and Trinidad and Tobago.

Table 1

Drawings and repayments under the Compensatory Financing Facility (CFF) and the Compensatory and Contingency Financing Facility (CCFF) (1982-1992)

Country	IMF drawings in billion SDRs (number of drawings)											
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	**Total**
Developing countries	1.6 (21)	2.6 (22)	0.8 (11)	0.8 (7)	0.6 (8)	1.2 (6)	0.7 (10)	0.8 (4)	0.1 (2)	1.9 (9)	0.1 (3)	11.2 (103)
Eastern Europe and Israel	0.07	-	-	-	-	-	-	-	-	1.1 (16)	0.3 (7)	1.4 (23)
Total	1.7	2.6	0.8	0.8	0.6	1.2	0.7	0.8	0.1	3.0	0.4	12.6
Memo Item: LDCs	0.1 (2)	0.1 (6)	0.01 (1)	0.04 (2)	0.04 (2)	0.1 (2)	0.02 (1)	-	-	-	-	0.41 (16)
	IMF repayments in billion SDRs (number of repayments) (a)											
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	Total
All developing countries	0.5 (34)	0.7 (40)	0.9 (42)	1.3 (52)	2.2 (58)	2.2 (36)	1.2 (33)	0.7 (24)	0.7 (26)	1.0 (20)	- -	11.4 (365)

(a) Repayments are made in quarterly installments in the third to fifth year after the drawing. Therefore the number of repayments far exceeds the number of drawings
Source: Based on information provided by the IMF

12. The most significant feature of the 1990s has been the substantial increase in the number drawings by Eastern European countries. These countries, notably Bulgaria, ex-Czechoslavakia, Hungary, Romania, and Poland, accounted for over 40 per cent of the total 3.5 billion SDR drawings made between 1990 and 1992. These drawings were all made to compensate for excess oil import costs.

13. Nearly 60 per cent of the total drawings made by developing countries in the 1990s have been for excess oil imports. Virtually all of these drawings were made in 1991, partly in response to the Gulf crisis that reduced the import capacity of many countries. The large number of drawings made under the oil import facility represents a recognition of the need for a rapid financial response to help countries that have been adversely affected by external shocks. As a result, disbursements under the oil import facility has been much quicker than those under the other elements of the CCFF. One drawing has been made under the cereal import facility in the 1990s and two drawings were made for shortfalls in tourism receipts, by Israel and Barbados in 1992. IMF estimates of export shortfalls and excess oil imports for developing countries making drawings under the CCFF amounted to 4.5 billion SDRs[6] between 1990 and 1992. Total developing country drawings in the same period amounted to 2 billion SDRs, representing a coverage rate of 44 per cent.

[6] The IMF uses as a reference level a 5-year geometric average formula centered on the year of the shortfall.

14. As can be seen from table 1, the dramatic fall in the number of drawings since 1983 has meant that the size of repayments of IMF compensatory financing drawings have exceeded the size of new drawings in six out of the ten years between 1982 and 1992.[7] For example in 1989, total drawings amounted to 808 million SDRs, while repayments were over 1.2 billion SDRs, and in 1990, total drawings amounted to 67 million SDRs, while repayments were ten times that amount at 677 million SDRs.

15. In recognition of the lack of drawings made by low income countries under IMF facilities including the compensatory financing facilities in the past due to the stringent access and repayment conditions and relatively high interest costs on purchases, the IMF established the Structural Adjustment Facility (SAF) in 1986 to provide balance-of-payments assistance on concessional terms to these low income countries. The Fund also introduced the Enhanced Structural Adjustment Facility (ESAF) in 1987 to increase substantially the amount of concessional financing available to the poorest members of the IMF undertaking macro-economic and structural adjustment programmes. These facilities were designed to enable the IMF to help strengthen the balance-of-payments positions of these countries in a sustainable manner. While few low-income countries have made drawings under the CCFF in recent years, the number of drawings made under the cheaper SAF and ESAF facilities has been considerable, as can be seen from table 2. Between 1988 and 1993, 33 countries made drawings for an amount of 3.6 billion DRs under these two facilities, with the ESAF facility

Table 2

Combined SAF and & ESAF drawings 1988-1993

Drawing in billion SDRs
(number of drawings)

Country	1988	1989	1990	1991	1992	1993 (a)	Total
Developing countries	1.4	0.5	0.5	0.7	0.4	0.1	3.6
	(11)	(8)	(3)	(8)	(6)	(3)	(39)
LDCs	0.2	0.3	0.4	0.4	0.2	0.1	1.6
	(7)	(6)	(2)	(7)	(4)	(3)	(29)

(a) as of end March 1993

Source: based on information provided by the IMF
Note: several countries have made more than one drawing between 1988 and 1993.

representing almost all of this. The main beneficiaries have been the low-income, highly commodity-dependent countries in Africa. The least developed countries as a group accounted for nearly half of the total SAF and ESAF drawings. The main advantages of the SAF and ESAF over the compensatory financing facilities are the low cost of finance (i.e. lower interest rate) and

[7] Since IMF repayments are made quarterly over a period of 3 years, some countries will have made several repayments between 1982 and 1992.

longer repayment period. However, there are still problems of considerable delays in the approval and timing of transfers because of the conditionality attached to such credits, with the conditionality attached to ESAF credits being more demanding than that attached to SAF credits.

16. The introduction of the SAF and ESAF by the IMF represents a significant policy change. By encouraging low-income developing countries to use these facilities instead of, or alongside, the CCFF, it is clear that the Fund now views balance-of-payments difficulties as signalling a structural problemrather than a short-term self-revising fluctuation in export earnings for which drawings from the CCFF were seen as a quick disbursing short-term solution. This change in policy is also reflected in theincreasing number of CCFF transfers that have been made as part of overall Fund economic assistance packages. Between 1989 and 1992, 7 out of 18 CCFF transfers to developing countries[8] were made as part of an overall Stand-By or Extended Arrangement.

17. In response to the severe drought conditions affecting, with varying intensity, at least 12 countries in Southern and Eastern Africa in 1991/92, the Fund announced in May 1992 its intention to provide financial assistance by using its current facilities to reduce the adverse affects of the drought on the balance of payments and overall economic situation of these countries.[9] The significant feature of this proposal was the combining of ESAF and the General Resources Account (GRA) resources of which the CCFF is a part. Under this proposal, countries eligible for ESAF transfers would be able to receive funds quickly from the CCFF for both export shortfalls and cereal import excesses arising from an economic emergency. The possible use of CCFF funds in combination with the ESAF again suggests that the Fund may see the CCFF as part of a cheaper overall medium to long-term economic assistance package to help low-income countries rather than an independent financial instrument for assisting countries facing short-term balance-of-payments difficulties.

18. In April 1993, the Fund Board approved the creation of the Systematic Transformation Facility (STF), a temporary facility to provide financial assistance to countries facing balance-of-payments difficulties arising from severe disruptions of their traditional trade and payments arrangements owing to a shift from significant reliance on trading at non-market prices such as prevailed among the former socialist countries of Eastern Europe.[10] The main beneficiaries of this facility will thus be these countries and it is not yet clear whether any developing countries may benefit from it. The facility will expire at the end of 1994.

19. It is clear that the small number of developing country drawings under the CCFF in recent years as a consequence of its strict eligibility conditions has forced the IMF to reassess the role of the CCFF. In January 1993, the Executive Board accepted IMF staff proposals to modify the CCFF by simplifying the operational modalities of both the compensatory and contingency element of the CCFF. However, from available information, it appears that these changes will

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[8] Algeria, Mexico, Papua New Guinea, Costa Rica, Panama, Jamaica, Philippines.

[9] IMF Survey, 11 May 1992, pages 159-160.

[10] IMF Survey, 3 May 1993, pages 129-130 and 136-137.

be mainly technical in nature, involving only modest refinements of current procedures.

20. The IMF compensatory financing facility can in principle play an important role in meeting the financial needs of countries experiencing short-term balance-of-payments difficulties arising from external shocks outside the control of individual countries and which were seen as self-reversing. The introduction of the oil facility and amendments to the export earnings element of the CCFF in 1990/91 to respond to external shocks, and the consequent increase in the number of drawings by countries, demonstrate that the CCFF can be an effective short-term instrument. However, it seems that its mechanisms are being adapted in an ad hoc manner through additional time-bound special elements which respond to specific crises rather than the facility itself being adapted to react more quickly and effectively to the needs of countries. This type of short-term mechanism does seem to have a place in the arsenal of support measures provided by the international community. Nevertheless, analysis of the recent shortfall experience of developing countries clearly shows that the balance-of-payments difficulties of most of them are not of a short-term, reversible nature, but are due to persistant structural imbalances at the world commodity level. As the CCFF is basically designed to cope with intermitent country-level difficulties, it does not seem to be an appropriate instrument for addressing the problems arising from these sorts of shortfalls.

Chapter II

RECENT DEVELOPMENTS IN THE COMPENSATORY FINANCING FACILITIES AVAILABLE FROM THE EEC AND SWITZERLAND

A. STABEX

21. STABEX, which was the first commodity-specific compensatory financing scheme, was introduced in the Lomé I Convention (1975-79), improved and expanded under Lomé II (1980-84) and Lomé III (1985-90) and is now governed by the Lomé IV (1991-95). The financial resources allocated to the STABEX system since its introduction in 1975 amount to 3.4 billion ECU, with 1.5 billion ECU (1.4 billion SDRs) being allocated under Lomé IV. Under Lomé IV, STABEX transfers are in the form of grants. However, the Commission of the European Communities has a more important role in deciding the use of transfers in recipient countries. Transfer funds are put into an account for which two signatures (of the recipient country and the Commission) are required before they can be released for use in the areas agreed jointly by the EC and the recipient ACP country. The reference level for the calculation of shortfalls has also been changed[11]. Table 3 below shows the total amount and number of transfers made under STABEX between 1982 and 1992. Between 1982 and 1992, a total of 2.7 billion ECU (2.4 billion SDRs) have been transfered under STABEX, with Côte d'Ivoire, Cameroon and Senegal accounting for 40 per cent of the total. Coffee and cocoa accounted for over 60 per cent of commodity transfers during this period.

Table 3
STABEX transfers 1982-1992

Transfers in million SDRs (number of transfers)												
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	total
Total ACP countries	277 (38)	95 (37)	45 (22)	25 (14)	112 (25)	203 (44)	335 (43)	278 (47)	181 (31)	447 (67)	364 (67)	2362 (435)
Least developed ACP countries	37 (25)	37 (25)	36 (17)	24 (11)	87 (20)	92 (35)	165 (30)	68 (35)	49 (19)	204 (47)	167 (47)	966 (311)

Source: Based on information provided by the Commission of the European Communities.

22. Since Lomé IV, a total of 877 million ECU (812 million SDRs) have been transfered under STABEX. EC estimates of total eligible STABEX transfers to ACP countries for this period amounted to 2.5 billion ECU (2.3 billion SDRs). STABEX transfers during this period thus represent a coverage rate of 35 per cent of estimated ACP shortfalls. Transfers have been highly concentrated in few

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[11] In the calculation of shortfalls under Lomé IV, the reference level used by the EC is the arithmetic average of export earnings during the period of the six calendar years preceding each year of application, less the two years with the highest and lowest figures. See STABEX Beneficiares Handbook, European Commission, Brussels, December 1990, for more details on the guidelines concerning the operation of STABEX under Lomé IV.

countries, with Côte d'Ivoire, Cameroon, Ethiopia and Uganda accounting for over 55 per cent of the total. The least developed countries as a group accounted for about half of the transfers under Lomé IV. Eighty per cent of the transfers in this period were for earnings shortfalls in coffee and cocoa exports. Other commodities for which transfers have been sizeable include cotton, copra and hides and skins, representing nearly 10 per cent of total transfers in the same period. Information on the use of transfers in recipient countries is at best sketchy, however it appears that most transfers have been used in the commodity sectors experiencing the shortfall and to support programmes introduced under structural adjustment. Very few transfers have been used for diversification purposes.[12]

23. The large number of transfers made to coffee and cocoa exporting ACP countries was due to the dramatic fall in world market prices for these two commodities between 1989 and 1991 as a result of over-supply in world markets. A large number of ACP countries particularly in Africa are highly dependent on coffee and cocoa and have experienced a sharp fall in their export earnings. EC estimates of ACP shortfalls in coffee and cocoa amounted to approximately 2.4 billion ECU (2.2 billion SDRs) between 1990 and 1992. STABEX transfers for these commodities amounted to 645 million ECU (600 million SDRs) representing a coverage rate of 27 per cent.

24. The sharp fall in world prices in the late 1980s and early 1990s for the two most important commodity exports of ACP countries and the low commodity coverage rate of STABEX transfers has highlighted the budgetary limitations of STABEX under Lomé IV. It is clear that for several years now, STABEX has been characterized by a chronic insufficiency of resources in coping with the huge demands made upon it. In the 1980s, STABEX ran out of funds in 1981 and 1982 and in three consective years between 1987 and 1989. During these years the number of requests rose rapidly due to dramatic falls in world commodity prices. Between 1988 and 1990, the EC transfered 162 million ECU (145 million SDRs) from SYSMIN funds left over from Lomé I and II to help ease the financial burden on STABEX. The relative inability of STABEX to provide adequate and quick financing to ACP countries during periods of falling commodity prices raises questions about its role as a commodity-specific compensatory financing mechanism. At the seventeenth Session of the ACP-EEC Council of Ministers held in Kingston, Jamaica (May 1992), the ACP States requested the EC to explore ways and means of augmenting resources available to the STABEX system through, inter alia, depositing all funds earmarked for STABEX under Lomé IV in an interest bearing account, and utilizing unallocated balances existing in the global European Development Fund of Lomé II and III. The ACP states have also requested payment of the balance of losses of earnings eligible for compensation for the 1980, 1981, 1987, 1988, and 1989 application years to help ease their current resource problems. The EC has tried to cope with the current resource problems of STABEX by making advance drawings on the resources for 1993 and 1994 and consequently reducing the allocations for the 1993 and 1994 application years.

25. The current situation of declining world commodity prices for the major commodity exports of ACP countries and the continuing sizeable shortfalls in ACP exports to the EC raises the question of whether STABEX is trying to cope with

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[12] A comprehensive report on the use of transfers in recipient countries is currently being prepared by the European Commission.

a problem beyond its mandate. The amount of resources available under Lomé IV have clearly been insufficient in meeting the needs of ACP countries experiencing sizeable shortfalls. Furthermore, the EC has imposed stringent conditions on access to funds before granting its signature, with these conditions often being related to the implementation of World Bank-sponsored structural adjustment programmes. As a result, in several cases there have been considerable delays of up to one year in the release of transfer funds. As STABEX was created to provide financial assistance to ACP countries facing short-term shortfalls in commodity export earnings, its current mechanisms are clearly inadequate for coping with the problems arising from long-term structural imbalance (oversupply) in the world markets of the major commodity exports of ACP countries. This is particularly the case for coffee and cocoa. In this respect, consideration needs to be given to adapting its mechanisms to meet the needs of beneficiary countries. A mid-term review of STABEX under Lomé IV was held in June 1993, the results of which are not available at the time of preparation of this report. Preliminary indications suggest that it has not addressed these basic problems. Further information on the outcome of this review will be provided during the session of the Standing Committee on Commodities.

B. SYSMIN

26. Since Lomé II, 1.3 billion ECU have been allocated to SYSMIN, with actual engagements amounting to 451 million ECU. The main beneficiaries of these loans have been mineral dependent African countries, with Zaire and Zambia accounting for half of total transfers. Most of the funds lent have been used for the rehabilitation or purchasing of new equipment.

27. Under Lomé IV, 480 million ECU (450 million SDRs) have been allocated to SYSMIN. In the period since 1991, a total of three requests have been made. A request from Namibia is based on the difficulties in the uranium industry. A request from Zambia is based on the loss of export income from copper and the Dominican Republic made a request based on difficulties in the gold mining sector. A total of 100 million ECU has been committed so far, 60 milion ECU earmarked for Zambia and 40 million ECU for Namibia, but no funds have been disbursed.

28. The long delays in making loans under SYSMIN and the redirection of 162 million ECU (145 million SDRs) of SYSMIN funds to STABEX between 1988 and 1990 raises questions about functioning of SYSMIN as timely source of low cost finance for mineral dependent ACP countries experiencing difficulties in their mining sectors. At present, there is no indication available from the EC about the future role of this scheme.

C. STABEX-LDC-ALA

29. Under STABEX-LDC-ALA, eight LDCs (Bangladesh, Bhutan, Haiti, Lao People's Democratic Republic, Maldives, Nepal, and the former Democratic Yemen and Yemen Arab Republic) not signatory to the Lomé Convention were eligible for transfers to compensate for export earnings shortfalls in their trade in individual agricultural products with the EC. However, four of these countries have not received transfers to date. Bhutan has not received transfers because nearly all of its trade is with India, and the value of exports of the Maldives to the EC are not sufficient to make it eligible. The changing political and economic situation in Democratic Yemen and Lao People's Democratic Republic has delayed

transfers to these countries. Since 1990, the number of countries now eligible for transfers has fallen to six as a result of Haiti becoming an ACP member country and the union of the two Yemens. In August 1988, the Commission proposed the inclusion of Myanmar, which was approved by the European Parliament in January 1989. However, the final decision for entry will depend on the future political situation in that country.

30. For the period 1987 to 1991, 47 million ECU (42 million SDRs) was earmarked for the scheme. Total eligible requests for transfers amounted to 47 million ECU. Therefore, this budget would have covered the totality of estimated shortfalls. In reality, however, the Commission was forced to cut back on this budget line because of its own budgetary problems. Between 1987 and 1991, four countries received 19 transfers totalling 33.4 million ECU (30 million SDRs). This represented a coverage rate of 71 per cent of estimated shortfalls, significantly higher than the coverage rate under STABEX. Bangladesh accounted for nearly 60 per cent of these funds, with transfers for tea and jute in 1987 and 1988, jute in 1989 and tea in 1990, totalling 19.5 million ECU (17 million SDRs). Nepal received transfers for hides and skins each year from 1987 to 1989 and for lentils from 1988 to 1990 for a total of 2.5 million ECU (2.2 million SDRs). Haiti reached agreement with the EC for transfers for cocoa and coffee in 1988 and 1989 amounting to 11 million ECU (10 million SDRs).[13] Yemen received 0.4 million ECU (0.35 million SDRs) in 1988 for shortfalls in coffee exports. All transfers were used in the sectors suffering the shortfall, and none for diversification. The most common uses specified for funds were infrastructural improvements, trade promotion, research and development, product development, purchasing of equipment, quality improvements, training, and the provision of extension services.

31. The STABEX-LDC-ALA system has often encountered problems associated with inaccurate shortfall statistics from recipient countries. To rectify this problem, the Comission introduced a new regulation stating that all shortfall statistics would be based solely on EC import figures. There have also been problems concerning the specific uses of transfered funds. For example, in 1989, the Commission suspended the transfer of funds to Nepal pending an inquiry by an expert auditor to ensure that the funds were been used for the appropriate purposes. Despite these problems the Commission reported that STABEX-LDC-ALA appears to have had a significant impact on the countries which have received transfers.[14]

32. The STABEX-ALA-LDC system expired on 31 December 1991. It is difficult at this stage to assess the future of this system as a source of compensatory finance, but according to Commission sources, there appears to be no real enthusiasism on the part of member States to review it. This means that the system has for all intents and purposes disappeared.

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[13] Following the events in Haiti at the end of September 1991, the Commission decided in October 1991 to suspend all Community economic aid to this country. This decision also covered STABEX-LDC-ALA transfer operations for the years of application 1987 and 1988.

[14] See Commission report " Rapport sur le fonctionnement du systeme de compensation des pertes de recettes d'exportation en faveur des pays les moins avances non signataires de la troisieme Convention ACP-CEE entre 1987 et 1991", European Commission, Brussels, 1991, p. 7.

D. The Swiss compensatory financing programme

33. In 1988, an initial allocation of 40 million Swiss francs (19.8 million SDRs) was earmarked for this programme. In 1990, this amount was increased to 90 million Swiss Francs (49 million SDRs) for a four-year period starting in 1991. The financing is made available either as part of multilateral co-financing or is granted under a bilateral agreement. The method used by the Swiss programme to calculate shortfalls is broadly the same as that of STABEX, i.e. it is based on the import quantities and export values of the STABEX commodities. Two additional criteria have been introduced: firstly, only exports worth more than 1 million Swiss francs (for all commodities from a given country) are taken into account. Secondly, Switzerland reserves the right to accumulate the shortfalls over two or three years and to combine them into a single transfer. Between 1988 and 1992, 10 least developed countries have reached agreement with Switzerland for transfers amounting to 87 million Swiss francs (46 million SDRs). Most of the transfers have been for shortfalls in cocoa, coffee, cotton and groundnut exports, and the funds have been allocated to structural adjustment programmes and the promotion of diversification activities. To date, the Swiss programme has compensated in total the shortfalls of these least developed countries arising from commodity exports to Switzerland.

Chapter III

CONCLUSION

34. It is clear that current compensatory financing facilities have been unable to meet the financing needs of developing countries faced with contracting export earnings. The Trade and Development Board at its sixteenth special session in March 1990 noted that " there was generally a significant difference between estimates of the size of total commodity export earnings shortfalls experienced by developing countries and the finance made available under existing compensatory financing facilities".[15] Traditional compensatory finance can play an important role at the country level in assisting countries facing short-term intermitent export earnings shortfall problems. However, during the 1980s and 1990s, the large size and recurrent nature of shortfalls in commodity export earnings of developing countries have been due primarily to the sharp falls in world market prices for their major commodity exports. The result has been that practically all developing countries have simultaneously experienced shortfalls in their commodity export earnings, with adverse medium to long-term effects on their balance of payments. Compensatory financing facilities were clearly not designed to cope with this problem. As a result both the amount of finance available under these facilities as well as their modalities have been insufficient and inappropriate for meeting the increased requirements of developing countries. Therefore, while short-term compensatory financing mechanisms should continue to assist countries with export earnings shortfalls when required, these facilities should be viewed as one short-term instrument in a range of longer and short-term measures provided by the international community and there is a need to examine the appropriate ways of tackling the types of shortfall problems now being experienced by developing countries.

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[15] See Trade and Development Board decision 379(S-XVI), para. 4.

ANNEX

Non-fuel commodity-related export earnings shortfalls experienced by developing countries during the 1980s

1. This annex, which reports on the shortfalls experienced by countries and by individual commodities during the 1980s, provides the background information for identifying priority areas for further and more specific studies in response to the terms of reference of the Standing Committee on Commodities, "analysing problems stemming from commodity-related shortfalls of developing countries and reviewing developments in the field of compensatory financing of export earnings shortfalls".* Ninety-three developing countries have been included in the analysis.[b] A 4-year moving arithmetic average was used to calculate the reference level against which shortfalls are measured.[c] Other formulae used for the calculation of the reference level such as a 5-year geometric average or a 3-year geometric average give similar results, while a long term calculation such as a 10-year exponential trend yields much higher estimates.[d]

2. In the first section, shortfalls in earnings from the commodity sector from a country as a whole are used; in the second, shortfalls are estimated at the commodity level. For this analysis all data have been translated into SDRs at the average annual SDR/Dollar exchange rate.*

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* See TD/B/CN.1/6 (October 1992), Report of the Standing Committee on Commodities on its first session, p. 18, section C.

[b] Export data for 121 developing countries are available. For calculations on non-fuel commodities, fifteen countries dependent on fuels for over 50 per cent of their total exports were omitted. Shortfalls in developing country export earnings from fuels were very large in the 1980s, amounting to 260 billion SDRs between 1980 and 1989, over 6 times larger than shortfalls in non-fuel commodities. Including fuels in this analysis would tend to shift the focus to fuels only. Thirteen other countries were omitted because of unrealiable export data.

[c] The formula used is:

$$S_t = x_t - \frac{\sum_{n=t-1}^{t-4} x_n}{4}$$

S = shortfall value
x = value of export earnings
t = time in years

In this formula, shortfalls are calculated as negative values and overages, positive, whereas in the text, shortfalls are reported in absolute terms.

[d] See TD/B/AC.43/5, Commodity export earnings shortfalls existing financial mechanisms and effects of shortfalls on the economic development of developing countries, 8 July 1987, pages 7, 10 and 30.

* In calculating country shortfalls and hence eligible amounts for compensatory financing, the IMF uses SDR's and the EEC uses ECU's. See TD/B/AC.43/5, op.cit., pages 12 and 13.

A. Commodity sector shortfall experience

3. The incidence of shortfalls in non-fuel commodity exports has risen sharply throughout the 1980s, as a result of falling world prices for major commodities, as well as a result of important supply fluctuations at the country level. Virtually all developing countries experienced sustained or recurrent shortfalls in the period 1980 to 1989. Combined sector shortfalls for all developing countries amounted to 41.6 billion SDRs for the decade. As can be seen from table 1, the largest shortfalls were relatively concentrated in a few countries notably in Southeast Asia and Latin America, with ten countries accounting for over half of combined developing countries sector shortfalls. As a region, Latin America experienced the largest shortfalls accounting for 52 per cent of the total, followed by Africa, 25 per cent and Asia, 23 per cent. The Least Developed Countries (LDCs) as a group made up 15 per cent of combined shortfalls.[f]

4. However, the absolute size of a country's shortfall is not a good reflection of the significance of the shortfall for a country as this depends on the size of its economy and its export sector. It seems more appropriate to examine shortfalls using a measure which relates the size of shortfalls to the export receipts of a country. One convenient way of expressing this is in terms of average months of export earnings lost during the period covered.[g] This approach illustrates quite dramatically the relative importance of the problem of shortfalls for various developing countries.

5. Table 1 shows that for the ten countries with the largest absolute shortfalls, shortfalls measured in months of export earnings for the period 1980 to 1989 varied from less than 1 month for Indonesia, a country with relatively well diversified exports, to 8.9 months for Côte d'Ivoire, a country that is dependent on non-fuel commodity exports for 70 per cent of its export earnings. On average for these countries, shortfalls were equivalent to 4.6 months of export earnings during the ten year period. In contrast, for the LDCs the magnitude of shortfalls in relation to months of export earnings was significantly greater at an average of 8.6 months (unweighted) or about three-quarters of one year's earnings.

6. It is important to note that some of the major exporters of non-fuel commodities are also significant fuel exporters, but with this fuel dependency being less than 50 per cent of export earnings. Such countries include Afghanistan,[h] Barbados, Bolivia, Cameroon, Colombia, Ecuador, Egypt, Indonesia, Malaysia, Mexico, Peru and Tunisia. Reported shortfalls in fuel export earnings rose rapidly in the 1980s. Table 2 shows that for nearly all these countries, the size of sector shortfalls expressed in months of export earnings increased considerably when fuels are included. The most dramatic changes occurred mainlyin countries with fuel dependency greater than 30 per cent. For example, in Mexico, adding fuels increases the size of sector shortfalls from only 0.07 months to

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[f] Least developed countries are included within their respective geographic regions as well as within the LDC grouping.

[g] For this analysis, the measure is average annual sector shortfalls 1980-89/average annual exports 1980-89.

[h] Exports of natural gas.

Table 1
Commodity sector shortfalls, 1980-89

Country	Sector shortfalls 1980-89 (billion SDRs)	Percentage of total developing country sector shortfalls	Sector shortfalls expressed in average months of export earnings lost
Brazil	4.8	11.5	2.6
Argentina	4.3	10.7	7.4
Cuba	3.6	8.7	8.4
Philippines	1.9	4.6	4.9
Côte d'Ivoire	1.8	4.3	8.9
Malaysia	1.7	4.1	1.5
Colombia	1.6	3.8	5.7
Indonesia	1.4	3.4	1.0
Peru	1.1	2.6	4.6
India	0.9	2.2	1.2
Subtotal of the 10 countries	**23.1**	**55.5**	**3.2**
Other Africa	**8.4**	**20.2**	**5.7**
Other Asia	**3.8**	**9.2**	**0.7**
Other Latin America	**6.3**	**15.1**	**2.3**
Total developing countries	**41.6**	**100**	**2.4**
Memo item: LDCs	**6.2**	**14.9**	**8.6**
Source: UNCTAD Secretariat calculations based on UN trade statistics			

16 months of export earnings. In Egypt, sector shortfalls increased from 4.4 months to over 20 months of export earnings. For this group of countries, sector shortfalls were on average equivalent to 13.3 months of export earnings.

7. As could be expected, the analysis shows that the higher the commodity concentration (dependence on 2-3 main commodity exports) of a country, the larger the size of sector shortfalls measured in months of export earnings. As can be seen from table 3, about one third of developing countries depend on three non-fuel commodities for over 80 per cent of their total exports. These countries accounted for a fifth of the combined value of sector shortfalls in the period 1980 to 1989, but only 6 per cent of total developing country exports and 9 per cent of total developing country commodity exports. Shortfalls for this groupof countries represented on average nearly 9 months of export earnings. Most of these countries are dependent on commodities such as coffee, cocoa, coffee, sugar and vegetable oils whose markets were characterized by declining world market prices in the 1980s. Within this group, sector shortfalls in terms of months of export earnings varied considerably from as high as 49.5 months for Sao Tomé and Principe to as low as 1 month for Mauritania.

Table 2

Shortfalls in terms of months of export earnings for major exporters of commodities and fuels

Country	Dependency on fuels in export earnings (average 1987-89)	Non-fuel sector shortfalls in average months of export earnings lost (1980-89)	Commodity sector shortfalls(including fuels) in monthsof export earnings lost (1980-89)
Afghanistan	42	7.9	17.1
Barbados	17	1.3	1.3
Bolivia	35	14.0	22.7
Cameroon	14	6.6	17.3
Colombia	30	5.7	5.9
Ecuador	46	1.1	14.3
Egypt	34	4.4	20.2
Indonesia	43	1.0	16.4
Malaysia	19	1.5	5.0
Mexico	36	0.07	16.0
Peru	12	4.8	10.4
Tunisia	20	0.5	9.6
Average		**1.6**	**13.3**
Source: UNCTAD Secretariat calculations based on UN trade statistics.			

8. Just over a quarter of developing countries had a commodity export concentration of less than 40 per cent. This lowest dependency group accounted for 47 per cent of the value of sector shortfalls, but for 79 per cent of total

Table 3

Relationship between shortfalls and commodity concentration

Country category Dependence on three main non-fuel commodities in export earnings (average 1987-1989)	Number of countries	Total commodity sector shortfalls (1980-89) (billions of SDRs)	Percentage of total developing country sector shortfalls (1980-1989)	Percentage of total developing country export earnings(a) (1980-89)	Percentage of total developing country commodity exports(a) (1980-89)	Sector shortfalls in terms of months of export earnings (1980-89)
>80%	29	8.4	20	6	9	8.7
60-80%	22	5.9	14	6	10	5.5
40-60%	17	7.6	18	9	10	5.1
<40%	25	19.7	48	79	71	1.4
Total	93	41.6	100	100	100	2.4
Source: UNCTAD secretariat calculations. (a) Total developing country commodity exports including fuels						

developing country total exports and 71 per cent of total developing country commodity exports. More importantly, shortfalls were equivalent to, on average, 1.4 months of export earnings, over 6 times less than for the greater than 80 per cent dependency group.

9. The strong relationship between commodity concentration, and the size of sector shortfalls relative to export earnings is further illustrated in table 4 which show the distribution of countries according to shortfalls expressed as months of export earnings. Nearly all the countries where sector shortfalls represented over 18 months of export earnings depended on three main non-fuel commodities for over 60 per cent of total export earnings. For example in Kiribati, a small island country that depends on vegetable oils for over half of its export earnings, sector shortfalls were equivalent to 5 years of export earnings for the ten year period 1980 to 1989. In Uganda, which relies on coffee for over 95 per cent ofits exports, sector shortfalls were equivalent to over 2 years of export earnings. For Nicaragua, a country heavily dependent on coffee exports, sector shortfall represented almost two and a half years of export earnings between 1980 and 1989. It is significant that, with the exception of Nicaragua, all the countries where sector shortfalls represented over 18 months of export earnings were LDCs highly dependent on one of coffee, cocoa, vegetable oils, copra or live animals as the main source of export earnings. In contrast, most of the countries where sector shortfalls were equivalent to less than 6 months of export earnings depended on three main non-fuel commodities for less than 40 per cent of their total exports.

Table 4

Relationship between commodity concentration and sector shortfalls expressed in months of export earnings for developing countries

		Commodity sector shortfalls in terms of months of export earnings, 1980-89				
Country category: Dependence on three main non-fuel commodities in export earnings (average 1987-89)	Number of countries	>18 months	12-18 months	6-12 months	<6 months	Average number of months
		Number of countries in each monthly category				
>80%	29	6	5	10	8	8.7
60-80%	22	4	2	6	10	5.5
40-60%	17	1	3	4	9	5.1
<40%	25		1	5	19	1.4
Total	**93**	**11**	**11**	**25**	**46**	**2.4**

10. It is interesting to note that for countries dependent on mineral exports, the significance of shortfalls has in general been lower than for countries dependent on agricultural exports. This is the case irrespective of a country's level of dependency. For example, in Guinea a major exporter of aluminium with a non-fuel commodity dependency of 99 per cent, sector shortfalls were equivalent to 7.0 months of export earnings. In Sierra Leone which depends on minerals for over 75 per cent of its exports and has an overall non-fuel

commodity dependency of 92 per cent, sector shortfalls were equivalent to 6.5 months of export earnings. In Mauritania which depends on iron ore for 42 per cent of exports and has a non-fuel commodity dependency of 98 per cent, sector shortfalls were equivalent to only 1 month of export earnings. In most countries exporting agricultural products with commodity concentration greater than 80 per cent, sector shortfalls represented more than one year of export earnings. In part this can be explained by the fact that world market prices for minerals have not fallen as sharply as in the case of agricultural commodities.

11. Table 5 shows that Africa accounted for a quarter of the total value of sector shortfalls, considerably higher than its 10 per cent share of total developing country exports and 14 per cent share of total developing country commodity exports. Indeed the size of shortfalls measured in months of exports has been the largest in Africa where on average it was equivalent to half a year of export earnings, 6 times greater than for Asia and 2 times greater than for Latin America. Of the three regions, Africa has the largest number of highly commodity dependent countries, and many of these countries are small countries, dependent on one or two commodities (mainly cocoa, coffee, cotton and vegetable oils) for over half of their exports, making their exports highly vulnerable to external market fluctuations. Shortfalls were equivalent to over 9 months of export earnings for African countries with a commodity export concentration greater than 80 per cent, and for only 1.2 months of exports for African countries with export concentration less than 40 per cent.

12. Commodity earnings shortfalls expressed in months of export earnings has been lowest in Asia were they were on average equivalent to 1 month of export earnings between 1980 and 1989. The Asian region has the least number of highly commodity dependent countries, with half the countries having a commodity export concentration of less than 40 per cent. The Asian region has some of the largest and fastest growing export economies in the world, and the substantial increase in export earnings in the 1980s has dwarfed the size of shortfalls experienced in that period. In this region the size of shortfalls measured in months of exports was 5 times higher for the group of countries with the highest commodity export concentration than for the group with the lowest concentration.

13. Latin America accounted for just over 50 per cent of total value of sector shortfalls, significantly higher than its 36 per cent share of developing countries total exports and 44 per cent share of total developing country commodity exports. Some Latin American countries are among the largest exporters of commodities in the developing world (Brazil, Argentina, Chile). Furthermore many countries in this region export commodities such as coffee, cotton, sugar and vegetable oils, for which shortfalls have been very large. Half of the countries in Latin America can be classified as highly commodity dependent. For this region shortfalls were on average equivalent to 3.6 months of export earnings between 1980 and 1989. For the over 80 per cent export concentration group of countries, shortfalls were equivalent to 8.5 months of exports while for the countries in the less than 40 per cent group, shortfalls represented only 2.5 months.

14. It is clear from table 5 that the economies of the LDCs were the most affected by sector shortfalls. They accounted for 15 per cent of the total value of developingcountry shortfalls, proportionally much more than their share of developing country total exports and commodity exports. For this group of countries, shortfalls were on average equivalent to over 8.6 months of total

Table 5
Commodity concentration and sector shortfalls by region

Region Dependence on 3 main non-fuel commodities in export earnings (1987-89)	Number of countries	Total commodity sector shortfalls (1980-89) (billions of SDRs)	Percentage of total developing country shortfalls (1980-89)	Percentage of total developing country exports(a) (1980-89)	Percentage of total developing country exports (a) (1980-89)	Sector shortfalls in terms of months of exports earnings (1980-89)
Africa						
>80%	23	4.3	10	3	5	9
60-80%	7	1	3	1	1	8.2
40-60%	7	4.3	10	4	6	6.3
<40%	4	0.5	1	2	2	1.2
Total	**41**	**10.1**	**24**	**10**	**14**	**6.1**
Asia						
>80%	2	0.1	0.2	0.1	0.2	5.4
60-80%	5	0.6	1	1	1	6.2
40-60%	4	0.4	1	2	1	1.2
<40%	13	8.8	21	53	40	1
total	**24**	**9.9**	**24**	**56.1**	**42.2**	**1**
Latin America						
>80%	4	3.9	10	3	4	8.5
60-80%	10	4.2	10	5	8	5.0
40-60%	6	2.9	7	3	3	5.9
<40%	8	10.5	25	25	29	2.5
Total	**28**	**21.6**	**52**	**36**	**44**	**3.6**
Memo item: LDCs						
>80%	23	4.9	12	2	4	8.6
60-80%	8	1.2	3	1	1	11.8
40-60%	4	0.9	2	1	1	6.8
<40%	4	0.5	1	1	1	7.4
Total	39	7.5	18	5	7	8.6

(a) total developing country export earnings
(b) total developing country commodity exports including fuels

exports between 1980 and 1989. Within the group of LDCs, there was no significant relationship between commodity concentration and the size of shortfalls measured in months of export earnings. In fact the 60-80 per cent

dependency group was the most affected, shortfalls accounting for almost one year of export earnings. This group contains countries that are dependent on two to three commodities such as coffee, cotton or vegetable oils which experienced a high level of shortfalls.

B. Individual commodity shortfalls

15. Country shortfalls in export earnings from an individual commodity can be due to a fall in prices or in export volumes or both. Export volume declines may be due to climatic conditions (e.g drought); falls in the availability of essential inputs such as fertilizers, pesticides and water supply; the incidence of plant disease; mining and port problems; poor export logistics; and inadequate quality and supply control. Changes in government policies, including exchange rate and pricing policies, may also affect exports, as do changes in trade barriers in importing countries. Additionally, several developing countries, in an effort to diversify their export bases, have increased their level of processing of primary commodities before export, with a reduction in their unprocessed and semi-processed exports which are used for the shortfall calculation in this paper.[i] This can lead to an anomaly of increased shortfalls at the commodity level as calculations are based on unprocessed and semi-processed export earnings. Shortfalls in export earnings of commodities such as cotton and timber can thus in part be explained by a shift in exports from raw or semi-processed forms to more processed forms. For example, a large part of shortfalls in cotton can be explained by the sharp increase in the level of processed cotton exports (cotton fabrics and garments) from major cotton exporters such as Egypt, India and Pakistan. A significant amount of the shortfalls in timber was due to the increase in the exports of finished wood products by countries such as Indonesia, Malaysia and the Philippines. Furthermore, a shift in production from one product to another (horizontal diversification) may result in a shortfall. For example, a significant part of shortfalls in cereals can be explained by the shift in Argentine production away from cereals to soyabeans. However, analysis of the shortfall data suggests that the fall in world commodity prices has been a main factor contributing to the commodity earnings shortfalls of developing countries in recent years.

16. Combined developing country individual commodity shortfalls amounted to 64 billion SDRs between 1980 and 1989.[j] Table 6 shows the size of shortfalls for the fifteen commodities with the largest shortfalls. These commodities accounted for nearly 90 per cent of combined gross commodity shortfalls for the included commodities between 1980 and 1989. Coffee experienced the largest shortfalls accounting for a fifth of the total. Sugar experienced the second largest shortfall accounting for 12 per cent of the total. The five commodities

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[i] For most commodities, the elementary processed stages have been included. For example, for cotton, cotton yarn is included but not cotton fabrics and garments, for tin, tin ore and metal are included but not tin alloys and semi-manufactures and in the case of sugar, refined sugar is included but not molasses and confectionery.

[j] Shortfalls were calculated at the country level for 27 individual commodities in world trade: bananas, bauxite/alumina/aluminium, bovine meat, cereals, cocoa, coffee, copper, cotton, dairy products, fish, fruits (other than bananas), hard fibres and products, hides and skins, iron ore, jute, manganese, meat (other than bovine), phosphates, roots and tubers, rubber, spices, sugar, tea, tin, tobacco, timber, vegetable oils

with the largest shortfalls namely coffee, sugar, vegetable oils, cereals and cocoa accounted for 60 per cent of combined commodity gross shortfalls, considerably higher than their 30 per cent share of total developing country commodity exports. Fish and tropical fruits, two of the fastest growing commodity exports of developing countries accounted for only 3 per cent of gross shortfalls due to the substantial increase in world trade in fish and tropical fruits; fish exports from developing countries doubled between 1980 and 1989, while fruit exports also expanded strongly.

Table 6

Shortfalls for major commodity exports of developing countries

Commodity	Cumulative shortfalls 1980-89 (million SDRs)	Percentage of total gross shortfalls of developing countries 1980-89	Export of commodity as % of total developing countries non fuel commodity exports 1980-89
Coffee	12543	20	9
Sugar	7887	12	7
Vegetable oils	7077	11	6
Cereals	6369	10	5
Cocoa	4733	7	3
Tin	3245	5	1
Cotton	3018	5	5
Tropical timber	2934	4	6
Copper	1739	3	5
Rubber	1730	3	1
Bauxite	1692	3	3
Fruits	1568	2	5
Tea	1328	2	1
Iron ore	980	2	3
Fish	725	1	8
Total	57568	89	68
Source: UNCTAD secretariat calculations based on UN trade statistics			

17. During the 1980s, the volume of developing country commodity exports increased significantly. Between 1980 and 1989 the volume of exports for the 15 commodities with the most sizeable shortfalls increased by over a fifth, while export revenue grew at a more modest 12 per cent. In the same period the size of export earnings shortfalls increased by over 200 per cent. Analysis of export data in the 1980s, shows that for most commodities, shortfalls increased during periods of falling world commodity prices, despite substantial increases in export volumes. This relationship was most evident in the latter half of the 1980s, when market prices for commodities such as cocoa, coffee, cotton, sugar, tin and vegetable oils fell sharply. For example, between 1987 and 1989, world market prices for cocoa fell by a third; export volume increased by 1 per cent

during this period while revenue from cocoa declined by over quarter and the size of shortfalls increased from 217 million SDRs to 1 billion SDRs. Between 1986 and 1989, world market prices for coffee fell by 40 per cent; during this period, export volumes increased by 13 per cent, while revenue fell by 40 per cent, and the size of earnings shortfalls quadrupled. Between 1985 and 1987, market prices for vegetable oils were at their lowest levels; during this period, export revenue fell by nearly 30 per cent, eventhough the volume of exports remained at approximately the same level. Analysis of data at the country level shows the strong effect of commodity price falls on the export earnings from a particular sector. For example in Uganda, shortfalls in coffee exports were at their highest levels between 1987 and 1989 (lowest world market prices for coffee). In the same period the volume of coffee exports expanded strongly, rising by fifth, while export revenue fell by 15 per cent. Between 1988 and 1989, world market prices for cocoa were also at their lowest levels. During this period, Côte d'Ivoire's production of cocoa for export increased by nearly a quarter, while export revenue declined by 3 per cent. During the 2-year period 1988-1989, the highest levels of cocoa shortfalls were recorded in Côte d'Ivoire. For the majority of developing countries, shortfalls were much lower during periods of rising or stable commodity prices.

18. The sharp decline in world market prices for commodities in the latter half of the 1980s, meant that a large number of developing countries experienced recurrent shortfalls in particular for bauxite/alumina/aluminium, cocoa, coffee, cotton, sugar, tin and vegetable oils. However for some developing countries, shortfalls occurred on and off throughout the whole of the 1980s. This reflects the combination of country-specific factors causing shortfalls as well as external factors. In several vegetable oil exporting countries such as Gambia, Guinea-Bissau (1986-87), and Sudan (1985-86), poor climatic conditions (drought) reduced supply for export and was a main factor responsible for their earnings shortfall experience. Civil unrest during the 1980s that disrupted supply of coffee in countries such as EL Salvador, Ethiopia, Guatemala, Nicaragua, Uganda has played an important role in the coffee shortfalls experienced by these countries.

19. For the other commodities experiencing sizeable shortfalls (cereals, copper, fish, fruits, iron ore, rubber, tea, tropical timber) world market prices were relatively stable during the 1980s and other factors contributed significantly to the occurence of shortfalls in particular countries. For example, the high production costs of tin mining reduced production and hence supply in many producing countries. Shortfalls experienced by bauxite/alumina/aluminium producers such as Guyana, Jamaica and Suriname were due mainly to reduced production levels. A significant level of shortfalls experienced by major copper exporters such as Zambia and Zaire was due to poor level of investment and maintenance which led to reduced domestic production. While for some countries the shortfalls were very significant, for the majority of developing countries exporting these commodities, the size of shortfalls were relatively low and of an intermitent nature.